

Section 1. Registration Information

Source Identification

Facility Name: Coim USA, INC.
Parent Company #1 Name:
Parent Company #2 Name:

Submission and Acceptance

Submission Type: Re-submission
Subsequent RMP Submission Reason: 5-year update (40 CFR 68.190(b)(1))
Description: TDI Process for Adhesive/Elastomer
Receipt Date: 18-Jul-2019
Postmark Date: 18-Jul-2019
Next Due Date: 18-Jul-2024
Completeness Check Date: 18-Jul-2019
Complete RMP: Yes
De-Registration / Closed Reason:
De-Registration / Closed Reason Other Text:
De-Registered / Closed Date:
De-Registered / Closed Effective Date:
Certification Received: Yes

Facility Identification

EPA Facility Identifier: 1000 0020 3317
Other EPA Systems Facility ID: 08066CPLYRMANTU
Facility Registry System ID:

Dun and Bradstreet Numbers (DUNS)

Facility DUNS: 102472029
Parent Company #1 DUNS:
Parent Company #2 DUNS:

Facility Location Address

Street 1: 286 Mantua Grove Road
Street 2: Building 1
City: West Deptford
State: NEW JERSEY
ZIP: 08066
ZIP4: 1738
County: GLOUCESTER

Facility Latitude and Longitude

Latitude (decimal): 39.823222
Longitude (decimal): -075.212527
Lat/Long Method: Address Matching - House Number
Lat/Long Description: Plant Entrance (General)
Horizontal Accuracy Measure: 10
Horizontal Reference Datum Name: North American Datum of 1983
Source Map Scale Number:

Owner or Operator

Operator Name:	COIM USA, INC.
Operator Phone:	(856) 224-8560

Mailing Address

Operator Street 1:	286 Mantua Grove Road, Building 1
Operator Street 2:	
Operator City:	West Deptford
Operator State:	NEW JERSEY
Operator ZIP:	08066
Operator ZIP4:	1738
Operator Foreign State or Province:	
Operator Foreign ZIP:	
Operator Foreign Country:	

Name and title of person or position responsible for Part 68 (RMP) Implementation

RMP Name of Person:	Michelangelo Cavallo
RMP Title of Person or Position:	President
RMP E-mail Address:	Michelangelo.Cavallo@coimgroup.com

Emergency Contact

Emergency Contact Name:	Dave Olsen
Emergency Contact Title:	QEHSSR Manager
Emergency Contact Phone:	(856) 224-8562
Emergency Contact 24-Hour Phone:	(856) 217-6482
Emergency Contact Ext. or PIN:	
Emergency Contact E-mail Address:	dave.olsen@coimgroup.com

Other Points of Contact

Facility or Parent Company E-mail Address:
Facility Public Contact Phone:
Facility or Parent Company WWW Homepage Address:

Local Emergency Planning Committee

LEPC:	West Deptford Twp LEPC
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Full Time Equivalent Employees

Number of Full Time Employees (FTE) on Site:	75
FTE Claimed as CBI:	

Covered By

OSHA PSM :	Yes
EPCRA 302 :	Yes
CAA Title V:	

Air Operating Permit ID:

OSHA Ranking

OSHA Star or Merit Ranking:

Last Safety Inspection

Last Safety Inspection (By an External Agency) Date:	06-Jun-2019
Last Safety Inspection Performed By an External Agency:	State environmental agency

Predictive Filing

Did this RMP involve predictive filing?:

Preparer Information

Preparer Name:	Heather Heacock
Preparer Phone:	(856) 224-8563
Preparer Street 1:	286 Mantua Grove RD
Preparer Street 2:	
Preparer City:	West Deptford
Preparer State:	NEW JERSEY
Preparer ZIP:	08066
Preparer ZIP4:	
Preparer Foreign State:	
Preparer Foreign Country:	
Preparer Foreign ZIP:	

Confidential Business Information (CBI)

CBI Claimed:
Substantiation Provided:
Unsanitized RMP Provided:

Reportable Accidents

Reportable Accidents:	See Section 6. Accident History below to determine if there were any accidents reported for this RMP.
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Process Chemicals

Process ID:	1000101668
Description:	Elastomer/Adhesive
Process Chemical ID:	1000127417
Program Level:	Program Level 3 process
Chemical Name:	Toluene diisocyanate (unspecified isomer) [Benzene, 1,3-diisocyanatomethyl-]
CAS Number:	26471-62-5
Quantity (lbs):	300000
CBI Claimed:	
Flammable/Toxic:	Toxic

Process NAICS

Process ID:	1000101668
Process NAICS ID:	1000102929
Program Level:	Program Level 3 process
NAICS Code:	32552
NAICS Description:	Adhesive Manufacturing
Process ID:	1000101668
Process NAICS ID:	1000102928
Program Level:	Program Level 3 process
NAICS Code:	325199
NAICS Description:	All Other Basic Organic Chemical Manufacturing

Section 2. Toxics: Worst Case

Toxic Worst ID: 1000081326

Percent Weight:	100.0
Physical State:	Liquid
Model Used:	EPA's RMP*Comp(TM)
Release Duration (mins):	60
Wind Speed (m/sec):	1.5
Atmospheric Stability Class:	F
Topography:	Urban

Passive Mitigation Considered

Dikes:	Yes
Enclosures:	
Berms:	Yes
Drains:	
Sumps:	Yes
Other Type:	

Section 3. Toxics: Alternative Release

Toxic Alter ID: 1000086818

Percent Weight:	100.0
Physical State:	Liquid
Model Used:	EPA's RMP*Comp(TM)
Wind Speed (m/sec):	2.5
Atmospheric Stability Class:	B
Topography:	Urban

Passive Mitigation Considered

Dikes:	Yes
Enclosures:	
Berms:	Yes
Drains:	Yes
Sumps:	Yes
Other Type:	

Active Mitigation Considered

Sprinkler System:	
Deluge System:	
Water Curtain:	
Neutralization:	Yes
Excess Flow Valve:	
Flares:	
Scrubbers:	
Emergency Shutdown:	
Other Type:	

Section 4. Flammables: Worst Case

No records found.

Section 5. Flammables: Alternative Release

No records found.

Section 6. Accident History

No records found.

Section 7. Program Level 3

Description

All elements apply to the production processes using TDI to make selected elastomers and adhesives.

Program Level 3 Prevention Program Chemicals

Prevention Program Chemical ID:	1000107138
Chemical Name:	Toluene diisocyanate (unspecified isomer) [Benzene, 1,3-diisocyanatomethyl-]
Flammable/Toxic:	Toxic
CAS Number:	26471-62-5
Process ID:	1000101668
Description:	Elastomer/Adhesive
Prevention Program Level 3 ID:	1000085878
NAICS Code:	32552

Safety Information

Safety Review Date (The date on which the safety information was last reviewed or revised):	01-May-2013
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Process Hazard Analysis (PHA)

PHA Completion Date (Date of last PHA or PHA update):	01-May-2013
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The Technique Used

What If:	Yes
Checklist:	
What If/Checklist:	
HAZOP:	Yes
Failure Mode and Effects Analysis:	
Fault Tree Analysis:	
Other Technique Used:	
PHA Change Completion Date (The expected or actual date of completion of all changes resulting from last PHA or PHA update):	30-Aug-2013

Major Hazards Identified

Toxic Release:	Yes
Fire:	Yes
Explosion:	
Runaway Reaction:	
Polymerization:	
Overpressurization:	
Corrosion:	
Overfilling:	Yes
Contamination:	
Equipment Failure:	

Loss of Cooling, Heating, Electricity, Instrument Air:

Earthquake:

Floods (Flood Plain):

Tornado:

Hurricanes:

Other Major Hazard Identified:

Process Controls in Use

Vents: Yes

Relief Valves: Yes

Check Valves:

Scrubbers: Yes

Flares:

Manual Shutoffs: Yes

Automatic Shutoffs: Yes

Interlocks: Yes

Alarms and Procedures: Yes

Keyed Bypass:

Emergency Air Supply:

Emergency Power:

Backup Pump:

Grounding Equipment:

Inhibitor Addition:

Rupture Disks:

Excess Flow Device:

Quench System:

Purge System:

None:

Other Process Control in Use:

Mitigation Systems in Use

Sprinkler System: Yes

Dikes: Yes

Fire Walls:

Blast Walls:

Deluge System:

Water Curtain:

Enclosure:

Neutralization:

None:

Other Mitigation System in Use:

Monitoring/Detection Systems in Use

Process Area Detectors:

Perimeter Monitors:

None:

Other Monitoring/Detection System in Use: Storage tank area detector

Changes Since Last PHA Update

Reduction in Chemical Inventory:

Increase in Chemical Inventory:

Change Process Parameters:
Installation of Process Controls:
Installation of Process Detection Systems:
Installation of Perimeter Monitoring Systems:
Installation of Mitigation Systems:
None Recommended:
None: Yes
Other Changes Since Last PHA or PHA Update:

Review of Operating Procedures

Operating Procedures Revision Date (The date of the most recent review or revision of operating procedures): 31-Dec-2018

Training

Training Revision Date (The date of the most recent review or revision of training programs): 01-Apr-2019

The Type of Training Provided

Classroom: Yes
On the Job: Yes
Other Training:

The Type of Competency Testing Used

Written Tests:
Oral Tests: Yes
Demonstration:
Observation: Yes
Other Type of Competency Testing Used:

Maintenance

Maintenance Procedures Revision Date (The date of the most recent review or revision of maintenance procedures): 11-Apr-2013

Equipment Inspection Date (The date of the most recent equipment inspection or test): 11-Feb-2012

Equipment Tested (Equipment most recently inspected or tested): R2 Temperature Transmitter

Management of Change

Change Management Date (The date of the most recent change that triggered management of change procedures): 17-May-2019

Change Management Revision Date (The date of the most recent review or revision of management of change procedures): 01-Jan-2015

Pre-Startup Review

Pre-Startup Review Date (The date of the most recent pre-startup review): 22-Feb-2019

Compliance Audits

Compliance Audit Date (The date of the most recent compliance audit): 06-Jun-2019

Compliance Audit Change Completion Date (Expected or actual date of completion of all changes resulting from the compliance audit): 31-Aug-2019

Incident Investigation

Incident Investigation Date (The date of the most recent incident investigation (if any)): 29-Jun-2019

Incident Investigation Change Date (The expected or actual date of completion of all changes resulting from the investigation): 31-Aug-2019

Employee Participation Plans

Participation Plan Revision Date (The date of the most recent review or revision of employee participation plans): 20-Dec-2011

Hot Work Permit Procedures

Hot Work permit Review Date (The date of the most recent review or revision of hot work permit procedures): 23-Jan-2018

Contractor Safety Procedures

Contractor Safety Procedures Review Date (The date of the most recent review or revision of contractor safety procedures): 28-Oct-2015

Contractor Safety Performance Evaluation Date (The date of the most recent review or revision of contractor safety performance): 06-Jan-2014

Confidential Business Information

CBI Claimed:

Section 8. Program Level 2

No records found.

Section 9. Emergency Response

Written Emergency Response (ER) Plan

Community Plan (Is facility included in written community emergency response plan?): Yes

Facility Plan (Does facility have its own written emergency response plan?): Yes

Response Actions (Does ER plan include specific actions to be taken in response to accidental releases of regulated substance(s)?): Yes

Public Information (Does ER plan include procedures for informing the public and local agencies responding to accidental release?): Yes

Healthcare (Does facility's ER plan include information on emergency health care?): Yes

Emergency Response Review

Review Date (Date of most recent review or update of facility's ER plan): 04-Dec-2014

Emergency Response Training

Training Date (Date of most recent review or update of facility's employees): 06-Aug-2018

Local Agency

Agency Name (Name of local agency with which the facility ER plan or response activities are coordinated): West Deptford LEPC

Agency Phone Number (Phone number of local agency with which the facility ER plan or response activities are coordinated): (856) 845-4004

Subject to

OSHA Regulations at 29 CFR 1910.38: Yes

OSHA Regulations at 29 CFR 1910.120: Yes

Clean Water Regulations at 40 CFR 112:

RCRA Regulations at CFR 264, 265, and 279.52:

OPA 90 Regulations at 40 CFR 112, 33 CFR 154, 49 CFR 194, or 30 CFR 254:

State EPCRA Rules or Laws:

Other (Specify): NJDEP TCPA (NJAC 7:31), NJDEP DPCC (NJAC 7:1:E)

Executive Summary

EXECUTIVE SUMMARY

COIM USA West Deptford, NJ

TDI Based Adhesive and Elastomer Processes

Coim USA is located in West Deptford, NJ and manufactures a variety of products. Founded in 1962, COIM specializes in polycondensation, polyaddition (polyurethane) products and many other chemical specialties. The quality, variety and extensive nature of its products range, makes Coim one of the major producers in its field.

Coim operates worldwide through a network of manufacturing sites, sales offices and agencies. Its workforce is dedicated to support guarantee of quality and service, ensuring flexibility and efficiency necessary from an important global industrial organization.

Regulatory Overview

The covered process is subject to the New Jersey Toxic Catastrophe Prevention Act (TCPA) (same as EPA Risk Management Program) as well as OSHA Process Safety Management (PSM) due to the presence of a toxic (Toluene Diisocyanate) material in the process. Other major New Jersey regulatory programs that affect the overall site include: Discharge Prevention Control and Countermeasures (DPCC) Plan, Stormwater Pollution Prevention Plan (SPPP), and air permitting.

Stationary Source Description

There is one storage tank, three reactors and a number of 55 gallon drums in a warehouse.

Covered Process Overview

The basic process is to make a polyurethane adhesive or elastomer product. The basic chemistry is as follows:

Polyols + Isocyanate = Polyurethane Elastomer or Adhesive

Various temperatures, processing times and trace ingredients will vary the final component mix and specifications. Ethyl Acetate will be used in the adhesive formulations as an added process ingredient.

The name Polyols refers to chemical compounds containing multiple hydroxyl groups such as dipropylene glycol. Various blends of 2, 4 and 2, 6 isomers of Toluene Diisocyanate (TDI) are used in the production of adhesives. The reactive ingredients in a typical system with TDI are hydroxyl-terminated Polyols. The process is mildly exothermic. Higher temperatures will cause product quality failure and not a safety issue.

The origin of polyurethane dates back to the beginning of World War II where it was first developed as a replacement for rubber. The versatility of this new organic polymer and its ability to substitute for scarce materials, spurred numerous applications. During World War II, polyurethane coatings were used for the impregnation of paper and the manufacture of airplane finishes and corrosion resistant coatings to protect metal, wood and masonry.

By the end of the war, polyurethane coatings were being manufactured and used on an industrial scale and could be custom formulated for specific applications. By the mid-50's, polyurethanes could be found in coatings and adhesives, elastomers and rigid foams. It was not until the late 1950's, that comfortable cushioning flexible foams were commercially available. With the development of a low-cost polyether polyol, flexible foams opened the door to the upholstery and automotive applications we know today.

Formulations, additives and processing techniques continued to be developed such as reinforced and structural moldings for exterior automotive parts and one-component systems. Today, polyurethanes can be found in virtually everything we touch - our desks, chairs, cars, clothes, footwear, appliances, beds, and the insulation in our walls, roof and moldings on our homes.

An Inherently Safer Technology (IST) review was done for these processes. No further risk reduction measures were identified.

General Surroundings/Potential Public Receptors

There are no potential public or environmental receptors within the expected TDI consequence impact area. There are residential development about 0.4 miles to the east and northeast. There are commercial or light industrial operations adjacent to the site.

In terms of the prevailing wind direction (towards the east), there are woods and open fields followed in about 0.4 miles with residential homes.

TDI Releases Scenarios and Risk Reduction

Most potential facility release scenarios have likelihood to occur of less than once every 10,000 years. By NJDEP TCPA rules no further risk reduction efforts are required because these events are deemed too unlikely to occur.

The only remaining alternate case scenarios are categorized into hose failures and human error (such as speared drums or adding water to a drum). Their likelihood is less than once in every 100 years and may have a total release of 50 to 300 gallons in a contained area.

The hose is based on the best available design and materials of construction. Hoses are inspected upon each use and are monitored during all operational uses. Hoses are used in these cases because of the need for a flexible connection and their use has been minimized. The expansion of TDI based processes will tend to further minimize hoses in the future by using solid pipelines instead.

The same analysis applies to the other human error based scenarios. The use of drums will be minimized in the future due to the use of piped connections and will hence reduce overall risk.

All available risk reduction measures have been implemented.

Emergency Response Plan

The site has an emergency response plan that deals with Toluene Diisocyanate and has been coordinated with local authorities.

5-year Accident History

In the past 5 years, there have been no accidental releases of Toluene Diisocyanate from the West Deptford facility which meet the reporting requirements described in the RMP or NJDEP TCPA regulations.

Planned Changes to Improve Safety

The facility resolves recommendations from HAZOPS and Incident Investigations, some of which may result in modification to the plant design and operating procedures. However, at this time no major administrative, operational, process, or equipment changes are planned for the facility.

Consequence Analysis Overview

The approved EPA model RMP* Comp (TM) was used to conduct the off-site consequences models.

Process Protection Overview

Process protections are primarily those measures that will reduce, prevent or minimize a release from happening or, if it did happen, minimize the consequences of that threat. These include:

- ¿ Preventive maintenance;
- ¿ Security measures such as fencing, video cameras, 24 hour guards and employee badges identification;
- ¿ SOPs and emergency response plan and associated training;
- ¿ Emergency response coordinated with West Deptford LEPC & local fire department;
- ¿ Unloading pump, high level reactor temperature interlocks;

- ¿ Secondary containment;
- ¿ Reactor and tank design and periodic internal testing;
- ¿ Warehouse foam fire protection system;
- ¿ Scrubber for all TDI air emissions including process safety valves;

Administrative Policies

The following are the primary policies and procedures associated with the covered processes:

TCPA 100 Overview

TCPA 101 Employee Participation

TCPA 102 TCPA Committee

TCPA 103 Management of Change (MOC)

TCPA 104 Pre Startup Safety Review (PSSR)

TCPA 105 Hazard Analysis

TCPA 106 Process Information

TCPA 107 Contractor Safety (see separate site wide policy and manual)

TCPA 108 Mechanical Integrity

TCPA 109 Audit

TCPA 110 Emergency Response (see separate site wide plan)

TCPA 111 Incident Investigation (see separate policy)

TCPA 112 Safety Policies and Permits such as Hot Work and Confined Space Entry (see separate site wide safety program)

TCPA 113 Training Policy and Procedure